



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,230	07/29/2003	Kazuo Kuroda	8014-1067	4765

466 7590 06/02/2006

YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER
----------

GUPTA, PARUL H

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/628,230	KURODA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Parul Gupta	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/29/03.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-19 are pending for examination as interpreted by the examiner. The IDS filed on 2/24/04 and 7/28/04 were considered.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 10-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 10-15 are drawn to a "program" per se as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not

Art Unit: 2627

physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al., US Patent 6,320,829.

Regarding claim 1, Matsumoto et al. teaches an information generating apparatus, comprising: a control information adding device (column 3, lines 22-25) for adding permission control information to recording information (column 2, lines 39-41), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions.

Regarding claim 2, Matsumoto et al. teaches the information generating apparatus according to claim 1, wherein: the control information adding device further adds copy restriction information to the recording information (column 2, lines 39-43), the copy restriction information restricting copy of the recording information for each of the regions after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40).

Regarding claim 3, Matsumoto et al. teaches the information generating apparatus according to claim 2, wherein; the permission control information and the copy restriction information include correlation information having a correlation for preventing tampering (column 3, lines 8-17).

Regarding claim 4, Matsumoto et al. teaches the information generating apparatus according to claim 1, wherein; the permission control information further includes period information indicating a period for permitting at least one of recording or reproduction of the recording information (column 15, lines 1-15).

Regarding claim 5, Matsumoto et al. teaches an information reproducing apparatus for reproducing the recording information outputted with addition of permission control information and copy restriction information (column 3, lines 18-34), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions, the copy restriction information restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62), the recording information including unit copy restriction information for each unit of predetermined information, the information reproducing apparatus, comprising: a first extracting device for extracting the unit copy restriction information from the recording information (done by the "output control device" as explained in column 3, lines 64-67), a second extracting device for extracting the copy restriction information from the recording information (done by "electronic watermark information judging device" as explained in column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting whether or not contents of the

extracted unit copy restriction information and contents of the extracted copy restriction information coincide with each other (done by element 43 of figure 4 and explained in column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when the contents of the extracted unit copy restriction information and the contents of the copy restriction information do not coincide with each other (done by element 43 of figure 4 and explained in column 4, lines 1-6).

Regarding claim 6, Matsumoto et al. teaches an information reproducing apparatus for reproducing recording information outputted with addition of permission control information and copy restriction information (column 3, lines 18-34 and column 4, lines 36-40, respectively), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions and including correlation information having a correlation for preventing tampering (inherent to copy prevention methods), the copy restriction information including the correlation information and restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40), the information reproducing apparatus, comprising: a first extracting device for extracting the permission control information from the recording information (done by the "output control device" as explained in column 3, lines 64-67), a second extracting device for extracting the copy restriction information from the recording information (done by "electronic watermark information judging device" as explained in column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting presence or absence of tampering based on the correlation information included in the extracted

permission control information and the extracted copy restriction information (done by element 43 of figure 4 and explained in column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when tampering is detected by the detecting device (done by element 43 of figure 4 and explained in column 4, lines 1-6).

Regarding claim 7, Matsumoto et al. teaches an information generating method, comprising a control information adding process of adding permission control information to recording information (column 3, lines 1-8), the permission control information controlling at least one of recording or reproduction of the recording information for each of predetermined regions.

Regarding claim 8, Matsumoto et al. teaches an information reproducing method for reproducing recording information outputted with addition of permission control information and copy restriction information (column 3, lines 18-34 and column 4, lines 36-40, respectively), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions, the copy restriction information restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40), the recording information including unit copy restriction information for each unit of predetermined information, the method, comprising: a first extracting process of extracting the unit copy restriction information from the recording information (column 3, lines 64-67), a second extracting process of extracting the copy restriction information from the recording information (column 3, lines 60-64 and column 4, lines 36-40), a

detecting process of detecting whether or not contents of the extracted unit copy restriction information and contents of the copy restriction information coincide with each other (explained in column 4, lines 1-6), and a reproduction control process of prohibiting reproduction of the recording information when the contents of the extracted unit copy restriction information and the contents of the extracted copy restriction information do not coincide with each other (explained in column 4, lines 1-6).

Regarding claim 9, Matsumoto et al. teaches an information reproducing method for reproducing recording information outputted with addition of permission control information and copy restriction information (column 3, lines 18-34 and column 4, lines 36-40, respectively), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions and including correlation information having a correlation for preventing tampering (inherent to copy prevention methods), the copy restriction information including the correlation information and restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62), the method, comprising: first extracting process of extracting the permission control information from the recording information (done by the "output control device" as explained in column 3, lines 64-67), second extracting process of extracting the copy restriction information from the recording information (done by "electronic watermark information judging device" as explained in column 3, lines 60-64 and column 4, lines 36-40), a detecting process of detecting presence or absence of tampering based on the correlation information included in the extracted permission control information and the extracted



copy restriction information (done by element 43 of figure 4 and explained in column 4, lines 1-6), and a reproduction control process of prohibiting reproduction of the recording information when tampering is detected by the detecting process (done by element 43 of figure 4 and explained in column 4, lines 1-6).

Regarding claim 10, Matsumoto et al. teaches a computer program (inherent to the method) representing a sequence of instructions, which is executed by a generating computer included in the information generating apparatus, the instructions cause the computer to function as a control information adding device for adding permission control information to recording information (column 2, lines 39-43), the permission control information controlling at least one of recording or reproduction of recording information for each of predetermined regions.

Regarding claim 11, Matsumoto et al. teaches a computer program (inherent to the method) representing a sequence of instructions, which is executed by a reproducing computer, the instructions cause the computer to function as: first extracting device for extracting unit copy restriction information from recording information (column 3, lines 64-67), second extracting device for extracting copy restriction information from the recording information (column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting whether or not contents of the extracted unit copy restriction information and contents of the extracted copy restriction information coincide with each other (explained in column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when the contents of the extracted unit copy restriction information and the contents of

the copy restriction information do not coincide with each other (explained in column 4, lines 1-6), the reproducing computer being included in an information reproducing apparatus for reproducing the recording information outputted with addition of the permission control information and the copy restriction information (column 2, lines 39-43 and column 4, lines 36-40, respectively), the permission control information controlling, for each of predetermined regions, at least one of recording or reproduction of the recording information including unit copy restriction information for each unit of predetermined information constituting the recording information, the copy restriction information restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40).

Regarding claim 12, Matsumoto et al. teaches a computer program (inherent to the method) representing a sequence of instructions, which is executed by a reproducing computer, the instructions cause the computer to function as: first extracting device for extracting permission control information from recording information (column 3, lines 64-67), second extracting device for extracting copy restriction information from the recording information (column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting presence or absence of tampering based on correlation information included in the extracted permission control information and the extracted copy restriction information (column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when tampering is detected by the detecting device (column 4, lines 1-6), the reproducing computer being included in an information reproducing apparatus for

reproducing the recording information outputted with addition of the permission control information and the copy restriction information (column 2, lines 39-43 and column 4, lines 36-40, respectively), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions and including correlation information having a correlation for preventing tampering, the copy restriction information including the correlation information and restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40).

Regarding claim 13, Matsumoto et al. teaches an information recording medium in which a program (inherent to the method) for an information generating is recorded so as to be readable by a computer included in an information generating apparatus, wherein the program allows the computer to function as a control information adding device for adding permission control information to recording information (column 2, lines 39-43), the permission control information controlling at least one of recording or reproduction of recording information for each of predetermined regions.

Regarding claim 14, Matsumoto et al. teaches an information recording medium in which a program (inherent to the method) for an information reproduction is recorded so as to be readable by a computer, wherein the program allows the computer to function as: first extracting device for extracting unit copy restriction information from recording information (column 3, lines 64-67), second extracting device for extracting copy restriction information from the recording information (column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting whether or not contents of the

extracted unit copy restriction information and contents of the extracted copy restriction information coincide with each other (explained in column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when the contents of the extracted unit copy restriction information and the contents of the copy restriction information do not coincide with each other (explained in column 4, lines 1-6), the reproducing computer being included in an information reproducing apparatus for reproducing the recording information outputted with addition of the permission control information and the copy restriction information (column 2, lines 39-43 and column 4, lines 36-40, respectively), the permission control information controlling, for each of predetermined regions, at least one of recording or reproduction of the recording information including unit copy restriction information for each unit of predetermined information constituting the recording information, the copy restriction information restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40).

Regarding claim 15, Matsumoto et al. teaches an information recording medium in which a program (inherent to the method) for an information reproduction is recorded so as to be readable by a computer, wherein the program allows the computer to function as: first extracting device for extracting permission control information from recording information (column 3, lines 64-67), second extracting device for extracting copy restriction information from the recording information (column 3, lines 60-64 and column 4, lines 36-40), a detecting device for detecting presence or absence of tampering based on correlation information included in the extracted permission control

Art Unit: 2627

information and the extracted copy restriction information (column 4, lines 1-6), and a reproduction control device for prohibiting reproduction of the recording information when tampering is detected by the detecting device (column 4, lines 1-6), the reproducing computer being included in an information reproducing apparatus for reproducing the recording information outputted with addition of the permission control information and the copy restriction information (column 2, lines 39-43 and column 4, lines 36-40, respectively), the permission control information controlling at least one of recording and reproduction of the recording information for each of predetermined regions and including correlation information having a correlation for preventing tampering, the copy restriction information including the correlation information and restricting copy of the recording information after the recording information is recorded (column 2, lines 58-62 and column 4, lines 36-40).

Regarding claim 16, Matsumoto et al. teaches a recording medium (element 48 of figure 4) for storing recording information and control information, the recording information serving as a target of at least one of recording and reproduction, the control information controlling one of the recording and reproduction using the recording information, the recording medium, comprising: a recording information recording region (column 2, lines 45-46) for recording the recording information with addition of the permission control information for controlling one of the recording and reproduction for each of predetermined regions (column 2, lines 39-41), and a control information recording region ("second portion") for recording the control information (column 2, lines 46-47 and column 4, lines 36-40).

Regarding claim 17, Matsumoto et al. teaches the recording medium according to claim 16, wherein copy restriction information is further added to the recording information (column 3, lines 1-8 and column 4, lines 36-40), the copy restriction information restricting copy for each of the regions after the recording information is recorded (column 2, lines 58-62).

Regarding claim 18, Matsumoto et al. teaches the recording medium according to claim 17, wherein the permission control information and the copy restriction information include correlation information having a correlation for preventing tampering (column 3, lines 8-17).

Regarding claim 19, Matsumoto et al. teaches the recording medium according to claim 16, wherein the permission control information further includes period information for permitting at least one of recording and reproduction of the recording information (column 15, lines 1-15).

### ***Conclusion***

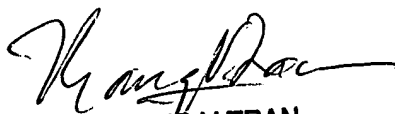
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,960,151 discloses similar material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 8:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG  
5/25/06

  
THANG V. TRAN  
PRIMARY EXAMINER